NASA'S MISSION TO PLANET EARTH
EARTH PROBES
DATA INFORMATION SYSTEM
EOS
EARTH OBSERVING SYSTEM

# FOS Overview

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# FOS CSR Roadmap

## Overview Material

**FOS Overview**
- CSR Objectives
- FOS Status & Schedule

**TRR Action Item Summary**
- Review each TRR action item
- Present status of each

## FOS System Status

**EOC Installation Status**
- Hardware status
- COTS status
- Open items

## FOS Dry-Run Phase

**Dry-Run Test Results**
- Dry-Run Test Status
- Technical Issues and Liens
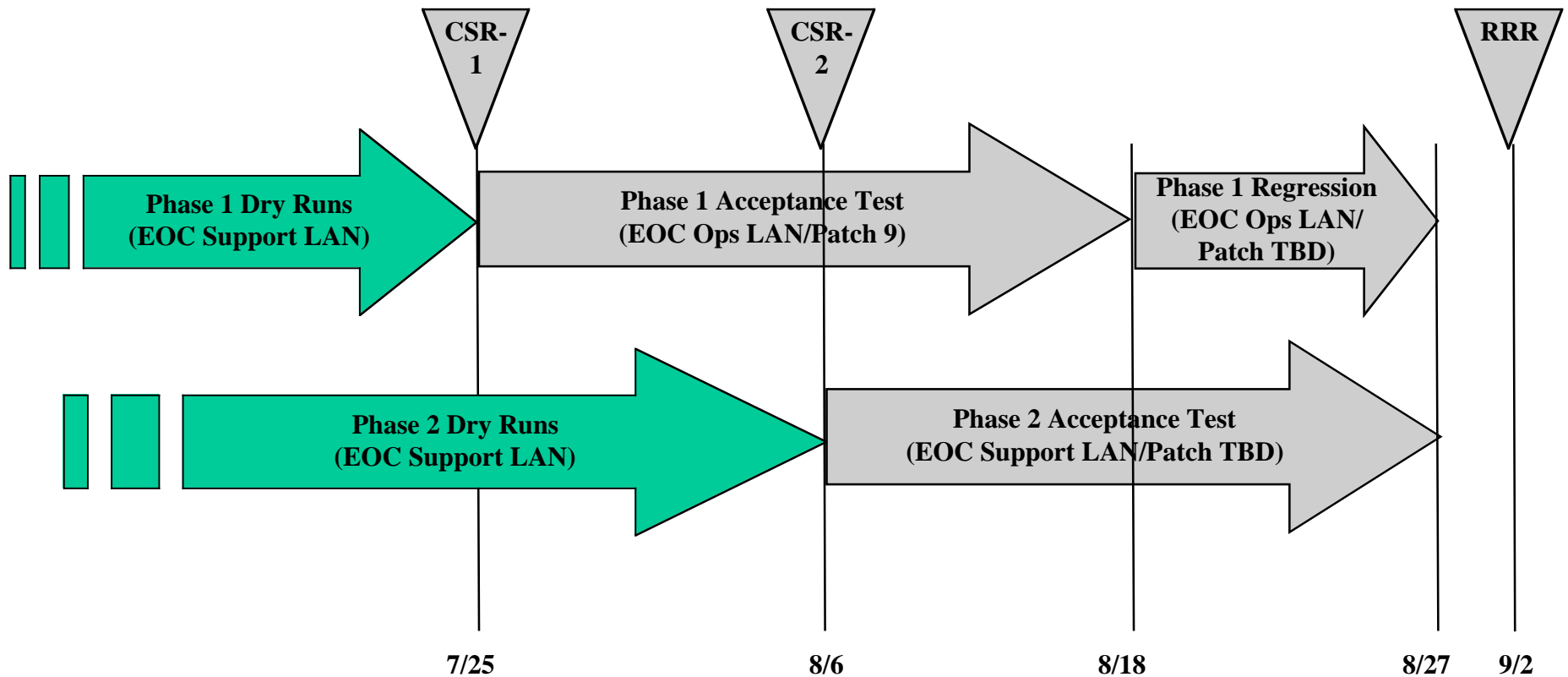
## FOS Acceptance Test Phase

**Acceptance Test Plans**
- EOC test environment
- EOC test activities
- EOC test process

**Audits**
- PCA
- FCA

# Road to FOS Release B RRR



CSR-1

CSR-2

RRR

Phase 1 Dry Runs
(EOC Support LAN)

Phase 1 Acceptance Test
(EOC Ops LAN/Patch 9)

Phase 1 Regression
(EOC Ops LAN/
Patch TBD)

Phase 2 Dry Runs
(EOC Support LAN)

Phase 2 Acceptance Test
(EOC Support LAN/Patch TBD)

7/25          8/6          8/18          8/27  9/2

# CSR Objectives

**CSR Objectives**

- **Closure of TRR action items**

- **Provide status on EOC installation**

  - **Hardware and network working in the EOC**

  - **COTS integrated in the EOC**

- **Demonstrate readiness of the application software for Acceptance Testing**

  - **Successfully completed Dry-Run Testing**

  - **Document liens against the FOS Release B system**

- **Demonstrate readiness of the FOS/ATO combined test team to proceed with testing**

  - **Red-lined Test Procedures**

  - **Acceptance Test processes clearly defined and documented**

  - **Defined test data and controlled test tools**

# Highlights/Goals

**FOS Test "Streamlining"**

- **Provided early delivery of FOS system to EOC (post-TRR)**
  - **COTS hardware and software installation**
  - **FOS Software installation**
  - **Test procedure checkout and dry-run**
- **Integrated FOS Test Team**
  - **FOS Test and Acceptance Test Organization team**
- **L4 requirements verification**
  - **Verification of L4 requirements during Acceptance Test phase in addition to RBR and IRD requirements**

# FOS Release B Documentation Summary

**TRR**

- **Test Procedures - DID 322/411**
- **Test Procedures - DID 322/411 and Test Reports - DID 324/412**

**Post-TRR (drafts)**

- **Programmer's Manual - DID 612**
- **As-Built Design Specification - DID 305**

**CSR**

- **Operations Tools Manual - DID 609**
- **Version Description Document (draft)**
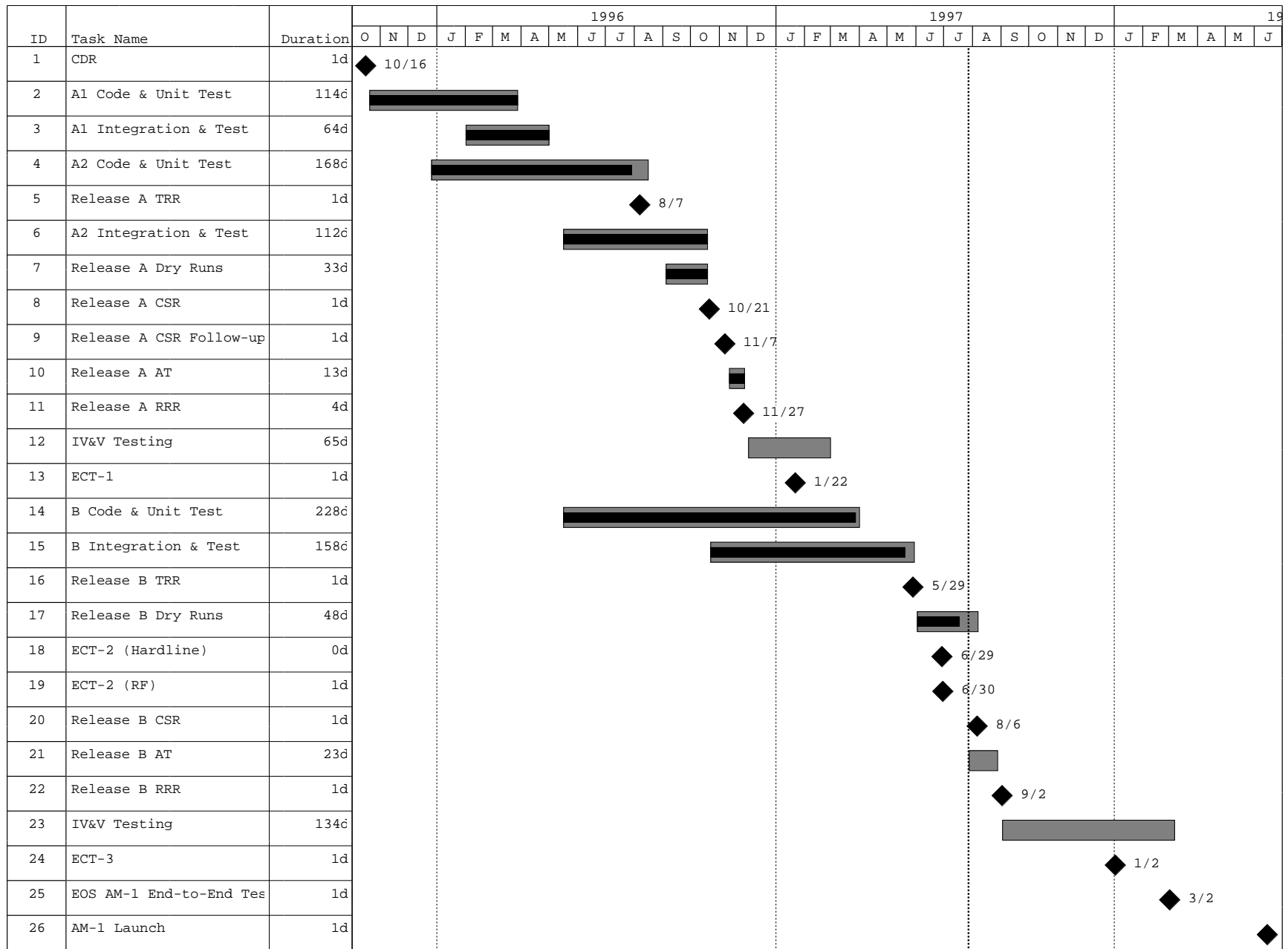- **Test Procedures - DID 322/411 (red-lines)**

**RRR**

- **Programmer's Manual - DID 612**
- **As-Built Specification - DID 305**
- **Version Description Document**
- **Acceptance Data Package - DID 535 and FCA/PCA Audit Report**

# FOS Schedule

See next page.

| ID | Task Name | Duration | 1996 | 1997 | 19 |
|----|-----------|----------|------|------|-----|
| | | | O N D J F M A M J J A S O N D | J F M A M J J A S O N D | J F M A M J |
| 1 | CDR | 1d | ◆ 10/16 | | |
| 2 | A1 Code & Unit Test | 114d | ▬▬▬ | | |
| 3 | A1 Integration & Test | 64d | ▬▬ | | |
| 4 | A2 Code & Unit Test | 168d | ▬▬▬▬ | | |
| 5 | Release A TRR | 1d | ◆ 8/7 | | |
| 6 | A2 Integration & Test | 112d | ▬▬▬ | | |
| 7 | Release A Dry Runs | 33d | ▬ | | |
| 8 | Release A CSR | 1d | ◆ 10/21 | | |
| 9 | Release A CSR Follow-up | 1d | ◆ 11/7 | | |
| 10 | Release A AT | 13d | ▬ | | |
| 11 | Release A RRR | 4d | ◆ 11/27 | | |
| 12 | IV&V Testing | 65d | | ▬▬ | |
| 13 | ECT-1 | 1d | | ◆ 1/22 | |
| 14 | B Code & Unit Test | 228d | ▬▬▬▬▬ | | |
| 15 | B Integration & Test | 158d | | ▬▬▬ | |
| 16 | Release B TRR | 1d | | ◆ 5/29 | |
| 17 | Release B Dry Runs | 48d | | ▬ | |
| 18 | ECT-2 (Hardline) | 0d | | ◆ 6/29 | |
| 19 | ECT-2 (RF) | 1d | | ◆ 6/30 | |
| 20 | Release B CSR | 1d | | ◆ 8/6 | |
| 21 | Release B AT | 23d | | ▬ | |
| 22 | Release B RRR | 1d | | ◆ 9/2 | |
| 23 | IV&V Testing | 134d | | ▬▬▬▬ | |
| 24 | ECT-3 | 1d | | | ◆ 1/2 |
| 25 | EOS AM-1 End-to-End Tes | 1d | | | ◆ 3/2 |
| 26 | AM-1 Launch | 1d | | | ◆ |

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# Training Plans

**Training to Date**

- FOT has received "hands-on" training during spacecraft tests (e.g. ECT-1, ECT-2)

- IOT has received "hands-on" training during ground system tests (e.g. IST installations)

**Future Training**

- Informal Training provided by current FOT w/ support as necessary from FOS (Aug '97 - Launch)
  - support of Operations CIs development, Exercises, Simulations and Spacecraft tests
  - IST Installations

- Formal Classroom Training provided by FOT (Feb '98 - Mar '98)